Application Serial No. 10/524,700 Attorney Docket No. 10191/3804 Reply to Final Office Action of September 16, 2009

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF THE CLAIMS:**

1-6. (Canceled).

7. (Currently Amended) A method for automatically initiating an emergency braking sequence, comprising:

performing a preliminary warning braking in a motor vehicle;

increasing a braking force during the preliminary warning braking until at least one wheel <a href="locks">locks</a> reaching[[es]] a <a href="maximum slip limit;">maximum slip limit;</a>

responsive to one of the braking force and a correlated state variable attaining a defined maximum value, ceasing the increasing of the braking force;

determining an <u>attainable</u> achievable vehicle deceleration during the preliminary warning braking, based on the maximum slip limit;

responsive to one of the braking force and [[a]] the correlated state variable attaining the defined maximum value, using a high estimated value of the attainable vehicle deceleration; [[and]]

varying a time of initiating an emergency braking as a function of the determined attainable achievable vehicle deceleration; and

correcting a provisional point in the time of initiating the emergency braking on the basis of the vehicle deceleration as given by a determined coefficient of friction.

8. (Previously Presented) The method as recited in Claim 7, further comprising:

decelerating at least one wheel of the motor vehicle to a slip limit during the preliminary warning braking.

9. (Canceled).

Application Serial No. 10/524,700 Attorney Docket No. 10191/3804 Reply to Final Office Action of September 16, 2009

- 10. (Currently Amended) The method as recited in Claim 7, wherein[[:]] the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.
- 11. (Previously Presented) The method as recited in Claim 10, further comprising:

  determining the coefficient of friction during preliminary warning braking; and
  controlling, in accordance with the determined coefficient of friction, a braking pressure
  buildup when initiating the emergency braking.

## 12. (Currently Amended) A control unit, comprising:

a situation analyzer unit for determining a point in time for initiating a warning braking and a later, provisional point in time of initiating an emergency braking on the basis of a measured distance to an obstacle and a measured relative velocity of this obstacle, as well as on the basis of a provisional value of a vehicle deceleration; and

an ABS/ESP control unit for modulating a braking pressure as a function of a slip condition of a braked wheel while computing a coefficient of friction of a roadway, the coefficient of friction being determined during the warning braking, the ABS/ESP control unit reporting the determined coefficient of friction to the situation analyzer unit[[,]];

wherein the braking pressure during the warning braking has a defined maximum value so that the coefficient of friction will be set to a high estimated value if the braking pressure during the warning braking reaches the defined maximum value,

wherein[[:]] the situation analyzer unit corrects the provisional point in <u>a</u> time of initiating [[an]] <u>the</u> emergency braking on the basis of the vehicle deceleration as given by the determined coefficient of friction, <u>and</u>

wherein a braking force is increased during a preliminary warning braking until at least one wheel locks reaching a maximum slip limit.

- 13. (Previously Presented) The control unit as recited in Claim 12, wherein at least one wheel of the motor vehicle is decelerated to a slip limit during the preliminary warning braking.
- 14. (Previously Presented) The control unit as recited in Claim 12, wherein the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.

Application Serial No. 10/524,700 Attorney Docket No. 10191/3804 Reply to Final Office Action of September 16, 2009

- 15. (Previously Presented) The control unit as recited in Claim 14, wherein the coefficient of friction is determined during preliminary warning braking, and in accordance with the determined coefficient of friction, a braking pressure buildup is controlled when initiating the emergency braking.
- 16. (Previously Presented) The control unit as recited in Claim 12, wherein at least one wheel of the motor vehicle is decelerated to a slip limit during the preliminary warning braking, wherein the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires, and wherein the coefficient of friction is determined during preliminary warning braking, and in accordance with the determined coefficient of friction, a braking pressure buildup is controlled when initiating the emergency braking.
- 17. (Currently Amended) The method as recited in Claim 7, further comprising:

decelerating at least one wheel of the motor vehicle to a slip limit during the preliminary warning braking;

determining the coefficient of friction during preliminary warning braking; and controlling, in accordance with the determined coefficient of friction, a braking pressure buildup when initiating the emergency braking;

wherein[[:]] the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.